



THE TRANSMITTER

November 2016

Article Reviews

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Regular exercise, quality of life, and mobility in Parkinson's Disease: A longitudinal analysis of National Parkinson Foundation Quality Improvement Initiative data.

The National Parkinson Disease Foundation Quality Improvement Initiative (NPF-QII) is collecting data from people with Parkinson's disease in four countries in the largest prospective study of PD to date. A cohort of participants with three observational study visits (n=3408) were identified, and their exercise habits examined to determine an association with changes in health-related quality of life (HRQL) and mobility. The primary outcomes were measured with the Parkinson's Disease Questionnaire (PDQ-39) and the Timed-Up-Go test. The results showed that patients who self-reported ≥ 2.5 hours of exercise per week at baseline had smaller decline in HRQL and mobility than non-exercisers over a 2 year follow-up period. Furthermore, increasing exercise by 30 minutes per week after baseline also demonstrated a positive effect. The benefit of exercise on HRQL and mobility was greater in advanced PD than in mild PD, which supports the importance of continuing to encourage exercise even later in the disease course. The NPF-QII investigators concluded that "consistently exercising and starting regular exercise after baseline were associated with small but significant positive effects on HRQL and mobility changes over two years."

J Parkinsons Dis. 2016 Nov 14. [Epub ahead of print]

<https://www.ncbi.nlm.nih.gov/pubmed/27858719>

Spinal cord stimulation improves gait in patients with Parkinson's disease previously treated with deep brain stimulation.

In advancing Parkinson's disease, gait disturbance and other axial signs have limited treatment options, and postural instability and gait disturbance (PIGD) have a significant impact on quality of life. Animal studies have shown that electrical stimulation of the spinal cord can improve locomotion, though previous human trials demonstrated conflicting results. The objective of this study was to evaluate the safety and efficacy of spinal cord stimulation (SCS) on PIGD in advanced PD patients who had previously undergone subthalamic deep brain stimulation (STN DBS). Four patients were treated with 300 Hz SCS. Baseline scores on the Timed-Up-Go and 20-meter walk tests, UPDRS III, freezing of gait questionnaire, and quality of life (PDQ-39) were compared to scores at 6 months post-treatment. Results showed a 50-65% improvement in gait measurements and a 35-45% improvement in UPDRS III and quality of life scores with SCS. In addition, blinded measurements on the Timed-Up-Go and 20-meter walk tests showed significant improvement in the 300 Hz spinal cord stimulation condition compared to sham 60 Hz stimulation. The researchers concluded that although this pilot study has limitations due to the small cohort and relatively short time period, "300 Hz SCS is safe and possibly effective in improving PIGD in advanced PT patients previously treated with STN DBS." A larger and longer study is needed to replicate these preliminary findings.

Mov Disord. 2016 Nov 10. doi: 10.1002/mds.26850. [Epub ahead of print]

<https://www.ncbi.nlm.nih.gov/pubmed/27862267>

Lower urinary tract symptoms in Parkinson's disease: Prevalence, aetiology and management.

Studies have shown that 27-85% of patients with Parkinson's disease report lower urinary tract symptoms, which are present early in disease and are more common in PD than in age-matched controls. Urodynamic studies have demonstrated detrusor overactivity, consistent with patients' reports of predominantly irritative symptoms. The underlying cause of lower urinary tract symptoms in PD is unclear. Research in animals and humans suggest that the net effect of the basal ganglia is to suppress micturition. Several small studies have reported benefit with bladder training, antimuscarinic medications, and intravesical botulinum toxin injections. Cognitive and gastrointestinal side effects of antimuscarinic drugs often limit their utility in PD patients. This review summarizes the literature regarding the prevalence, pathophysiology, and treatment options for lower urinary tract symptoms in PD.

[Parkinsonism Relat Disord.](#) 2016 Nov 1. pii: S1353-8020(16)30429-1. doi: 10.1016/j.parkreldis.2016.10.024. [Epub ahead of print]

<https://www.ncbi.nlm.nih.gov/pubmed/27865667>

Committee Activities

Clinical Care Committee

- **Rotation of Committee Chair:** Leadership for the clinical care committee rotates amongst the PADRECCs. The Southwest PADRECC leads the committee for October/November. The committee meets via conference call the first Tuesday of the month at 12pm (EST)
- **Standardize and Optimize Clinical Care:** The committee continues to discuss latest research on PD, new treatment strategies and a variety of clinical issues to improve patient care and outcomes. It also serves to provide clinical support to the consortium network by focusing on measures to standardize clinical care across the PADRECC network. Recent agenda items have included discussions on:
 1. New PD treatments in the pipeline, including ND0612, which is a proprietary formulation of levodopa and carbidopa continuously administered subcutaneously and extended release Amantadine formulation. Discussions focused on reviewing the safety, tolerability and clinical efficacy data, presented at recent scientific meetings.
 2. Continued discussion focused on clinical experience sharing among the group regarding DUOPA™ (carbidopa and levodopa) enteral suspension delivered directly into the small intestine for the treatment of motor fluctuations for people with advanced Parkinson's disease and Rytary (carbidopa/levodopa IR/SA combination oral medication). Recent discussions have focused on learning optimal titrating schedules, strategies to manage complication, logistical and support issues
 3. Continued experience sharing regarding the use of various Neurotoxins across the PADRECC network with the objective to improve this specialized clinical practice and develop neurotoxin selection criteria for various conditions in the Veteran population.
 4. Practical aspects regarding the use of DAT scans; applications and pitfalls, including the issue of drug interference
 5. Palliative Care: Review of palliative care resources and practices in the PADRECCs
 6. Veteran's Choice Program: re-distribution of resources, optimal use of the program, impact on VA based sub-specialty care.

7. Consortium Sites: Strategies to improve communications, enhance educational and clinical support and develop research projects with the consortium sites.
8. New MRI body scanning protocols for DBS implanted patients
9. Discussed the FDA-approved antipsychotic for PD, pimavanserin. PBM review scheduled for Fall 2016. In the interim, local P/T committee review/approval required. PADRECCs have circulated their applications to streamline individual on-boarding. Discussed likely indication and criteria for use.
10. Continued discussion of Rytary and dosing strategies. Consensus that often more than a three times/day scheduled is needed.

Education Committee

- **PADRECC/EES Movement Disorder Series:** The first audioconference for FY 17 was held on **November 10, 2016** "*Cholinergic Function and PD*" by Kathy Chung, MD Northwest PADRECC. The audioconferences are archived on the National website www.parkinsons.va.gov under the Movement Disorder Series tab. Please see the **Dates to Remember** section below for a listing of upcoming FY 17 audioconferences.
- **Patient Education Brochures:** In response to the 2016 National VA PD Consortium Education Needs Assessment, the existing patient education brochures are in the process of being updated. Once completed they will be made available on the National Website for download.
- **2016 National Consortium Conference:** Presentations from this conference are available for viewing on the National Website:
http://www.parkinsons.va.gov/Consortium/Presentations/2016_Consortium_Meeting_asp.asp
- **National Website Maintenance:** The committee performs monthly maintenance checks of the National Website to ensure information is current and up-to-date.
- **"Mood Disorders in PD: What's New:"** This enduring material project was done in collaboration with EES and is an on-line TMS self-study program that offers CME credit for a 3 year period. This program provides VHA healthcare professionals with a broadened medical awareness of Mood Disorders in PD. The program is available on TMS:
https://www.tms.va.gov/learning/user/deeplink_redirect.jsp?linkId=ITEM_DETAILS&componentID=14771&componentTypeID=VA&revisionDate=1343926380000
- **PADRECC Transmitter:** The committee continues to assemble and distribute this e-newsletter every other month.

Southwest PADRECC Service Area Updates

Southwest PADRECC

Director: Indu Subramanian, MD

- **New Faculty at the Southwest PADRECC:**
 - **Dr. Ausaf Bari**-Neurosurgeon
 - **Dr. Denise Feil**-Geriatric Psychiatrist
 - **Dr. Adrienne Keener**-Movement Disorders Neurologist

Dates to Remember

January 12, 2017

EES/PADRECC Movement Disorders Series

Topic: Yoga & Mindfulness

<http://www.parkinsons.va.gov/>

March 9, 2017

EES/PADRECC Movement Disorders Series

Topic: Exercise as Medicine

<http://www.parkinsons.va.gov/>

April 22-28, 2017

American Academy of Neurology: Annual Meeting

Boston, MA

<https://www.aan.com/conferences/2017-annual-meeting/submit-your-abstract/>

May 11, 2017

EES/PADRECC Movement Disorders Series

Topic: Creativity and Parkinson's Disease

<http://www.parkinsons.va.gov/>

June 4-8, 2017

21st International Congress of Parkinson's Disease and Movement Disorders

Vancouver, BC

<http://www.mdscongress2017.org/Congress-2017.htm>

September 14, 2017

EES/PADRECC Movement Disorders Series

Topic: Cognition and Exercise

<http://www.parkinsons.va.gov/>